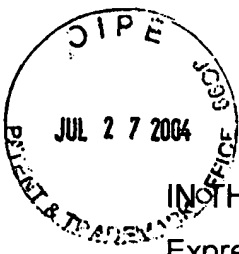


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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Express Mail Label No. ED106093754US

In re application of: Michael P. Ryan et al

Date: July 26, 2004

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GROUP 3600

Serial No.: 10 / 049,697

Examining Gr.: 3652

Filed: June 5, 2002

Examiner: James W. Keenan

For: REFUSE COLLECTION VEHICLES AND  
METHOD OF MANUFACTURING

Honorable Assistant Commissioner of Patents,  
Washington, D.C. 20231

**Reinstatement of the appeal is hereby requested.**

**SUPPLEMENTAL APPEAL BRIEF**

(1) REAL PARTY IN INTEREST

THE HEIL COMPANY

(2) RELATED APPEALS AND INTERFERENCES

None

(3) STATUS OF THE CLAIMS

Claims 1-8 (Cancelled)

Claims 9-26 (Rejected and Appealed)

#### (4) STATUS OF AMENDMENTS

No amendments have been made to the claims.

#### (5) SUMMARY OF THE INVENTION

The following is found at page 6, lines 1-17:

Briefly, to achieve the desired objects and advantages of the instant invention, a congeneric series of refuse collection vehicles (front loader, side loader and rear loader) is manufactured from modules. The primary modules are the body module 72 (Figs. 2 and 8-10), the tailgate module 82A, 82B or 82C (Figs. 5-7) and the hopper module 92A, 92B or 92C (Figs. 11-14). The body module 72 is preferably manufactured with a constant cross-sectional perimeter, shape or profile (Figs. 8-10). The refuse storage capacity of the body module is changed by varying the length of the body module 72 (Figs. 8-10). The tailgate module 82 and the hopper module 92 are manufactured to have a cross-sectional perimeter that mates with cross-sectional perimeter of the ends of the body module 74, 76 where they overlies each other. The lifter module 102A, 102B or 102D (Figs. 11-14) is added to the chassis 42, the tail gate module 82 or the body module 92. The modules are formed from a base set of pieces that are the same for each module and a selected /specified set of pieces that are dictated by the type of refuse collection vehicle selected. The dedicated tooling, fixtures and jigs are the same for each selected/specified module.

The invention is set forth in the independent claims 9,15 and 21 in the underlined portions for emphasis:

Claim 9 (Previously presented): A fleet of refuse collection vehicles (RCVs) comprising the following types of RCVs,

a front loader refuse collection vehicle (RCV) made from a body module, a hopper module and a tailgate module and

a side loader RCV made from a body module, a hopper module and a tailgate module,

each body module having similar ends,

each body module being manufactured so that one end will mate with and overlie an end of a tailgate module of a front loader RCV and a side loader RCV and so that the other end will mate with an end of a hopper module of a front loader RCV and a side loader RCV.

Claim 15 (Previously presented): A fleet of refuse collection vehicles (RCVs)

comprising the following types of RCVs,

a front loader refuse collection vehicle (RCV) made from a body module, a hopper module and a tailgate module and

a rear loader RCV having a body module and a tailgate module made from a hopper combined therewith,

each body module having similar ends,

each body module being manufactured so that one end will mate with and overlie an end of a tailgate module of a front loader RCV and a rear loader RCV and so that the other end will mate with an end of a hopper module of a front loader RCV.

Claim 21 (Previously presented): A fleet of refuse collection vehicles (RCVs)

comprising the following types of RCVs,

a side loader RCV made from a body module, a hopper module and a tailgate module and

a rear loader RCV made from a body module and a tailgate module having a hopper combined therewith,

each body module having similar ends,

each body module being manufactured so that one end will mate with and overlie an end of a tailgate module of a side loader RCV and a rear loader RCV and so that the other end will mate with an end of a hopper module of a side loader RCV.

The independent claims 9, 15 and 21 each claim two of the set of three different types of RCVs – front loader, side loader and rear loader. These claims replaced the original claims to remove a previous 35 USC 112 rejection on “alternate claiming”. Thus, each independent claim requires that there be at least two different types of RCVs incorporating the invention. Claim 9 requires a front loader and a side loader. Claim 15 requires a front loader and a rear loader. Claim 21 requires a side loader and a rear loader.

The invention addresses many of the difficulties of the industry:

The following is found at page 3, line 7 to page 4, line 11:

Typically, the fledgling manufacturer of refuse handling vehicles begins by fabricating a single specific unit. A production line is established with the attendant tooling, jigs and fixtures dedicated to that unit. As the company grows, the unique appearance of that initial unit provides name recognition. Subsequently, the company desires to add another refuse handling unit to which

the components of the initial unit are not adaptable. A second production line, with attendant dedicated tooling, jigs and fixtures, is then established. Hence, the company expands by increasingly adding production lines. It is commonplace for established manufacturers to have several unique production lines, each producing a specific configuration with a dissimilar appearance. While components may be interchangeable among units produced on a given production line, only minor components are interchangeable with units from another line.

It is immediately apparent that the several production lines require considerable floor space within the manufacturing facility. An immense inventory of subassemblies, components and parts, unique to each line, must be fabricated and maintained. Each requires a substantial investment in dedicated tooling, fixtures and jigs. Numerous employees, including fabrication, supervisory and quality control personnel, each trained and specializing in the fabrication of a particular unit and not readily transferable to another unit, are mandatory to operate the several lines. Accordingly, the manufacture of a refuse collection unit is inordinately expensive; a cost which is passed on the consumer.

The multiplicity of products, differing in appearance greatly diminishes product recognition. Should the company desire to produce yet another configuration, recognition would not be inherently present. Concentration on fewer parts simplifies and enhances quality control.

The addition of a new unit is replete with various expensive and time consuming considerations. Initially required is extensive engineering to design the unit from conception to finished product. Then additional floor space must be acquired and allotted to the establishment of yet another production line. New tooling and fixtures must be crafted. Finally, additional personnel must be acquired and trained.

The invention ameliorates many of the difficulties:

The following is found a page 4, line 13 to page 5, line 20:

Accordingly, it is an object of the present invention to provide a method of producing a congeneric series of diverse refuse collection vehicles with minimal components and subassemblies.

Another object of this invention is the provision of means whereby variously configured refuse collection vehicles may be produced, interchangeably, upon a single production line.

And another object of the invention is to provide a method of fabricating a fleet of diverse refuse collection vehicles utilizing mutual tooling, jigs and fixtures.

Still another object of the instant invention is the provision of means of producing a fleet of refuse collection vehicles sharing numerous common parts, components and subassemblies.

Yet another object of this invention is to provide means for producing a variety of refuse collection vehicles with substantially reduced inventory.

And still another object of the invention is the provision of a method of production requiring reduced floor space, personnel and other facilities.

Yet still another object of immediate invention is to provide a method of manufacturing whereby the time and expense of adding a new product will be substantially reduced.

And a further object of the invention is the provision of a method of readily producing refuse collection vehicles of varying capacity.

A still further object of the invention is to provide for method of manufacture whereby a refuse collection vehicle of a specific configuration is readily and easily convertible to another configuration.

And still a further object of the invention is the provision of a method, according to the foregoing, which will substantially reduce the cost of fabricating refuse collection vehicles.

(6) ISSUES

Whether claims 9-26 are unpatentable under 35 USC 112 because the specification does not reasonably provide enablement for a fleet of vehicles.

Whether claims 9-26 are unpatentable under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention since it is not clear what a fleet means.

Whether claims 9-26 are unpatentable under 35 USC 103 over Zanzig (US 6,183,185) in view of Schaffler (US 4,096,959) when considered with Dempster (US 3,202,305) or Winter (US 4,986,716). The Appellant has combined the rejections of the claims in order to simplify the issues. All of the claims will stand or fall on whether the Zanzig teaches using interchangeable body modules on different types of RCVs. The other references teach the use of the other elements of the claims in the RCV industry.

(7) GROUPING OF THE CLAIMS

All of the claims stand or fall together.

(8) ARGUMENT

Claims 9-26 are rejected as unpatentable under 35 USC 112, first paragraph, because the specification does not reasonably provide enablement for a fleet of vehicles.

This issue was not previously raised during a lengthy prosecution. It is submitted that is inappropriate to find no objection to this term throughout the prosecution, and now to bring it up at a time in which there is no chance for the Appellant to amend the claims to find acceptable language.

Further, it is submitted that the term fleet is an appropriate definition in this application.

One of the definitions of a fleet according to The American Heritage Dictionary, Second Collegiate Edition, published by Houghton-Mifflin, 1976, is a group of vehicles, such as taxi cabs or fishing boats, owned or operated as a unit.

The independent claims 9, 15 and 21 each claim two of the set of three different types of RCVs – front loader, side loader and rear loader. These claims replaced the original claims to remove a previous 35 USC 112 rejection on “alternate claiming”. Thus, each independent claim requires that there be at least two different types of RCVs incorporating the invention. Claim 9 requires a front loader and a side loader. Claim 15 requires a front loader and a rear loader. Claim 21 requires a side loader and a rear loader.

The vehicles of the claims would be initially owned by the manufacturer of the RCVs. Therefore, the term fleet is submitted to be appropriate.

Further at page 4, lines 28-30, the specification states: Still another object of the instant invention is the provision of means of producing a fleet of refuse



collection vehicles sharing numerous common parts, components and sub-assemblies. Thus, the specification provides basis for the recitation of the term fleet in the claims.

Claims 9-26 are rejected unpatentable under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention since it is not clear what a fleet means.

Again this issue was not previously raised during a lengthy prosecution. It is submitted that is inappropriate to find no objection to this term throughout the prosecution, and now to bring it up at a time in which there is no chance for the Appellant to amend the claims to find acceptable language.

Again one of the definitions of a fleet according to The American Heritage Dictionary, Second Collegiate Edition, published by Houghton-Mifflin, 1976, is a group of vehicles, such as taxi cabs or fishing boats, owned or operated as a unit. It is submitted that a group of refuse collection vehicles would also be a fleet.

The claims define a fleet as any two RCVs from the group of vehicles: a front loader RCV, a side loader RCV and a rear loader RCV.

A manufacturer that offers for sale a selection of RCVs that meet the limitations of the claims would be a contributory infringer. The manufacturer would be contributing to the infringement by the customer who bought two RCVs that met the limitations of the claims.

It is submitted that the term fleet is clear and appropriate.

However, if the term is deemed to be inappropriate, the Appellant will substitute language that is deemed appropriate.

Claims 9-26 are rejected as unpatentable under 35 USC 103 over Zanzig (US 6,183,185) in view of Schaffler (US 4,096,959) when considered with Dempster (US 3,202,305) or Winter (US 4,986,716)

The rejection of all of the claims, which are directed to refuse collection vehicles, is based on the use of the Zanzig reference to teach the use of body modules that have ends that are similar and that mate with a hopper module and a tailgate module of a front loader or side loader RCV or with a tailgate module of a rear loader. The specification is clear that all of the body modules for a front loader, a side loader and a rear loader are similar. Thus one cross-section of body module can be used for all of the different types of RCVs.

There is no discussion in the Zanzig reference of making the ends of the body module of a front loader, side loader or rear loader similar and the attendant benefits from such a design. The Zanzig reference is assigned to and owned by the assignee of the present application, The Heil Company. The special knowledge that the company employees have about that reference is clear. Appellant hereby offers to provide an affidavit from the inventors as to the showings in the reference.

Further if the present invention was taught in the Zanzig reference, there would have been no need for this application. Further it is submitted that the Zanzig reference would not support the claims of the application.

Further, as is set forth in MPEP 2125, PROPORTIONS OF FEATURES IN A DRAWING ARE NOT EVIDENCE OF ACTUAL PROPORTIONS WHEN DRAWINGS ARE NOT TO SCALE.

There is no disclosure in Zanzig that the drawings are to scale.

Further, in Zanzig, no one drawing or embodiment is being used to meet the limitations of the claims. Instead, the proportions of several different drawings and several different embodiments are being used to teach the invention.

Although the body modules of Zanzig reference may appear to be the same, that showing is purely coincidental.

There is no portion of the specification of the Zanzig reference that teaches the use of body modules that have ends that are similar and that mate with a hopper module, a tailgate module of a front loader or side loader RCV or with a tailgate module of a rear loader.

Only with the benefit of Appellant's specification could the references be modified to make the changes necessary to meet the language of Appellant's claims. That language is set forth in all of the independent claims and shown underlined for emphasis here in independent claim 9:

Claim 9 (Previously presented): A fleet of refuse collection vehicles (RCVs) comprising the following types of RCVs,

a front loader refuse collection vehicle (RCV) made from a body module, a hopper module and a tailgate module and

a side loader RCV made from a body module, a hopper module and a tailgate module,

each body module having similar ends,

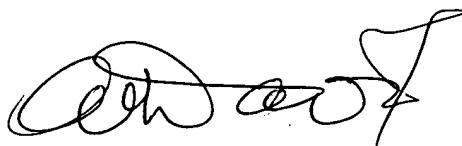
each body module being manufactured so that one end will mate with and overlie an end of a tailgate module of a front loader RCV and a side loader RCV and so

that the other end will mate with an end of a hopper module of a front loader RCV and a side loader RCV.

Schaffler, Dempster and Winter are completely conventional RCVs that suffer the same disadvantages discussed in Appellant's specification with respect to the prior art. These references were applied only to show elements that are claimed and that are well known in the industry.

Therefore, it is submitted that references do not disclose the teachings of Appellant and do not teach the attendant benefits derived from those teachings. Further, it is submitted that the specific limitations of the independent claims 9, 15 and 21 are not found in references.

For the above reasons, it is respectfully requested that the rejections of claims 9-26 under 35 USC 112 and 103 be reversed.

A handwritten signature in black ink, appearing to read 'Albert W. Davis Jr.', with a stylized flourish at the end.

Albert W. Davis Jr.  
Reg. No. 38,773

(9) APPENDIX

Claims 1-8 (Previously numbered 1-5,5,6 and 7) (Cancelled)

Claim 9 (Previously presented): A fleet of refuse collection vehicles (RCVs) comprising the following types of RCVs,  
a front loader refuse collection vehicle (RCV) made from a body module, a hopper module and a tailgate module and  
a side loader RCV made from a body module, a hopper module and a tailgate module,  
each body module having similar ends,  
each body module being manufactured so that one end will mate with and overlies an end of a tailgate module of a front loader RCV and a side loader RCV and so that the other end will mate with an end of a hopper module of a front loader RCV and a side loader RCV.

Claim 10 (Previously presented): The fleet of RCVs of claim 9 wherein,  
each body module includes a refuse storage capacity,  
the body modules have varied lengths to create a different refuse storage capacity for each RCV.

Claim 11 (Previously presented): The fleet of RCVs of claim 9 wherein, the front loader RCV has a hopper module with a loader module attached to the hopper module.

Claim 12 (Previously presented): The fleet of RCVs of claim 9 wherein, the front loader RCV has a loader module attached to a chassis portion of the RCV.

Claim 13 (Previously presented): The fleet of RCVs of claim 9 wherein, the side loader RCV has a loader module attached to a chassis portion of the RCV.

Claim 14 (Previously presented): The fleet of RCVs of claim 9 wherein, the side loader RCV has a loader module attached to the hopper module of the RCV.

Claim 15 (Previously presented): A fleet of refuse collection vehicles (RCVs) comprising the following types of RCVs,  
a front loader refuse collection vehicle (RCV) made from a body module, a hopper module and a tailgate module and  
a rear loader RCV having a body module and a tailgate module made from a hopper combined therewith,  
each body module having similar ends,  
each body module being manufactured so that one end will mate with and overlie an end of a tailgate module of a front loader RCV and a rear loader RCV and so that the other end will mate with an end of a hopper module of a front loader RCV.

Claim 16 (Previously presented): The fleet of RCVs of claim 15 wherein,  
each body module includes a refuse storage capacity,  
the body modules have varied lengths to create a different refuse storage capacity for each RCV.

Claim 17 (Previously presented): The fleet of RCVs of claim 15 wherein,  
the front loader RCV has a hopper module with a loader module attached to the hopper module.

Claim 18 (Previously presented): The fleet of RCVs of claim 15 wherein, the front loader RCV has a loader module attached to a chassis portion of the RCV.

Claim 19 (Previously presented): The fleet of RCVs of claim 15 wherein, the rear loader RCV has a loader module attached to the tailgate module of the RCV.

Claim 20 (Previously presented): The fleet of RCVs of claim 15 wherein, the rear loader RCV has a loader module attached to a body module portion of the RCV.



Claim 21 (Previously presented): A fleet of refuse collection vehicles (RCVs) comprising the following types of RCVs,  
a side loader RCV made from a body module, a hopper module and a tailgate module and  
a rear loader RCV made from a body module and a tailgate module having a hopper combined therewith,  
each body module having similar ends,  
each body module being manufactured so that one end will mate with and overlie an end of a tailgate module of a side loader RCV and a rear loader RCV and so that the other end will mate with an end of a hopper module of a side loader RCV.

Claim 22 (Previously presented): The fleet of RCVs of claim 21 wherein,  
each body module includes a refuse storage capacity,  
the body modules have varied lengths to create a different refuse storage capacity for each RCV.

Claim 23 (Previously presented): The fleet of RCVs of claim 21 wherein,  
the side loader RCV has a loader module attached to a chassis portion of the RCV.

Claim 24 (Previously presented): The fleet of RCVs of claim 21 wherein, the side loader RCV has a loader module attached to the hopper module of the RCV.

Claim 25 (Previously presented): The fleet of RCVs of claim 21 wherein, the rear loader RCV has a loader module attached to the tailgate module of the RCV.

Claim 26 (Previously presented): The fleet of RCVs of claim 21 wherein, the rear loader RCV has a loader module attached to a body module portion of the RCV.